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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|--------------|----------------------|---------------------|------------------|
| 10/721,943 | 11/25/2003 | Michael J. Zdroik | 65,221-008 | 8312 |
| 7590 08/10/2005 | | | EXAMINER | |
| Ernest E. Helms | | | YUEN, HENRY C | |
| DYKEMA GOS | SSETT PLLC | | | |
| Suite 300 | | | ART UNIT | PAPER NUMBER |
| 39577 Woodward Avenue | | | 3747 | |
| Bloomfield Hill | ls, MI 48304 | • | 7 - MT | _ |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s | \$) | | | | |
|--|--|--|--|------------------------|--|--|--|--|
| Office Action Summary | | 10/721,943 | ZDROIK ET | AL. | | | | |
| | | Examiner | Art Unit | | | | | |
| | | Weilun Lo | 3747 | | | | | |
| Period fo | The MAILING DATE of this communication apor Reply | pears on the cover s | heet with the corresponder | nce address | | | | |
| THE - External control | MAILING DATE OF THIS COMMUNICATION. In six of time may be available under the provisions of 37 CFR 1. If SIX (6) MONTHS from the mailing date of this communication. If period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statut reply received by the Office later than three months after the mailing period patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, howeve bly within the statutory minimu will apply and will expire SIX e, cause the application to be | r, may a reply be timely filed um of thirty (30) days will be consider (6) MONTHS from the mailing date of | of this communication, | | | | |
| Status | | | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 23 M | May 2005 | | | | | | |
| | This action is FINAL . 2b) This action is non-final. | | | | | | | |
| | Since this application is in condition for allowa | | al matters, prosecution as | to the merits is | | | | |
| ,— | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposit | ion of Claims | | | | | | | |
| 4)⊠ |)⊠ Claim(s) <u>17-21,23-28 and 30</u> is/are pending in the application. | | | | | | | |
| | 4a) Of the above claim(s) <u>17 and 23</u> is/are withdrawn from consideration. | | | | | | | |
| 5)□ | Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ | ☑ Claim(s) <u>18-21,24-28 and 30</u> is/are rejected. | | | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | | | |
| | Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| Applicat | ion Papers | | | | | | | |
| 9)[| The specification is objected to by the Examin | er. | | | | | | |
| | 0)⊠ The drawing(s) filed on <u>23 May 2005</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner. | | | | | | | |
| ,— | | | • | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11) | The oath or declaration is objected to by the E | | | | | | | |
| | under 35 U.S.C. § 119 | | | | | | | |
| _ | Acknowledgment is made of a claim for foreign | n priority under 35 H | S.C. 8 110(a) (d) or (f) | | | | | |
| | ☐ All b)☐ Some * c)☐ None of: | • | | | | | | |
| | 1. Certified copies of the priority documen | | | | | | | |
| | 2. Certified copies of the priority documen | | | | | | | |
| | 3. Copies of the certified copies of the price application from the International Burea | | | tional Stage | | | | |
| * (| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| | | | | | | | | |
| Attachmer | nt(e) | | | | | | | |
| _ | n(s) ce of References Cited (PTO-892) | 4) [] in | erview Summary (PTO-413) | | | | | |
| _ | ce of Draftsperson's Patent Drawing Review (PTO-948) | | per No(s)/Mail Date | • | | | | |
| 3) 🔲 Infor | mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 or No(s)/Mail Date |) 5) □ No | tice of Informal Patent Application | on (PTO-152) | | | | |
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DETAILED ACTION

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Drawings

1. Figure 14 (new), sheet 4 of 4, was received on 5/23/05. The new sheet is not approved. "New Sheet" must be labeled. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 18-21 and 28 are rejected under 35 U.S.C. 102(e) (in the alternative as 35 U.S.C. 102(b)) as being anticipated by Hiraku et al. (US 6,505,608 or US 2002/0033167, application publication thereof). Hiraku et al. show a fuel rail assembly as claimed including first and second fuel rails 53a, 53b, two crossover conduits 57, 58, and fluid flow restrictors 58, 58' in one of the cross over conduits. At least one fuel rail (53a or 53b) having an inlet (58 or 58') for receiving pressurized fuel. The two crossover tubes (one at each end of the fuel rails) are non-symmetric with one another due to one crossover tube having the restrictors 58, 58'.

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 5. Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiraku et al. (US 6,505,608) in view of Schwegler et al. (US 6,431,149) or Lorraine (US 5,168,856). Hiraku et al. show the invention substantially as claimed, however, do not specifically show the connector fitting details between the fuel rail and the cross over conduit. Schwegler et al. teach a connector 4 as a male barbed member having a flow restrictor within section 15 and elastic tubular bodies such as polymeric hose connected thereto. Lorraine also teaches a connector 28 as a male barbed member having a flow restrictor (internal narrowed passage) and polymeric hose connected thereto. It would

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have been obvious at the time of the invention for one of ordinary skill in the art to have modified the fuel rail assembly of Hiraku et al. to include the teachings of either Schwegler et al. or Lorraine in that such connectors are well known in the art for fuel rails and cross over conduits in order to provide a secure connection and a flexible

conduit to allow manipulation if necessary for fitting within an engine compartment.

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6. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiraku et al. (US 6,505,608). Hiraku et al. show the invention substantially as claimed, however, do not specifically mention the pressure range (psi) of the pressurized fuel. It would have been obvious at the time of the invention for one of ordinary skill in the art to have provided the fuel rail assembly of Hiraku et al. in order to provide the pressurized fuel to be in the range of 45-60 psi in that such are well known pressure ranges within the art and a matter of obviousness choice in design.

Response to Arguments

2. Applicant's arguments filed 5/23/05 have been fully considered but they are not persuasive. Hiraku et al. show all the claimed elements. Particularly with respect to "at least one fuel rail (53a or 53b) having an inlet (58 or 58') for receiving pressurized fuel". The claim does not require that the inlet receive the pressurized fuel directly from the pump, and indeed, each fuel rail has an inlet to receive pressurized fuel generated from the fuel pump. Therefore, 58 and 58' as depicted in Figure 2 of Hiraku et al. act as inlets.

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Conclusion

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note particularly, Usui (US 6,415,768) showing restrictors 3a-3g placed at the end of a fuel conduit to suppress pressure pulsations.
- 3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weilun Lo whose telephone number is (571) 272-4847. The examiner can normally be reached on 8:30AM TO 7:00PM M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on (571) 272-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Weilun Lo Primary Examiner Art Unit 3747